

Decadal changes in genetic diversity of Puget Sound coho salmon

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The management of coho salmon in Puget Sound during the 20th century included a period of fish transfers between rivers as part of hatchery enhancement programs. Little is known about the impacts of these transfers on wild populations of coho salmon. Introduced fish that survived and spawned successfully may have detectably altered the genetic diversity of wild populations. We used archived scales collected in the 1930s from coho salmon in Puget Sound and contemporary tissue samples from the same locations to describe temporal changes in genetic diversity at microsatellite loci. Various statistical methods were employed to determine the effects of past fish transfers on genetic diversity and population structure. Results and preliminary recommendations for management will be presented.